

# INTERNATIONAL SEARCH REPORT

Int'l Application No  
 PCT/GB2004/001687

**A. CLASSIFICATION OF SUBJECT MATTER**  
 IPC 7 C07D491/04 A61P31/00

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
 IPC 7 C07D A61P

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data, CHEM ABS Data

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

| Category ° | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No.  |
|------------|---|------------------------|
| X          | WO 02/083651 A (UNIV KINGSTON)<br>24 October 2002 (2002-10-24)<br>page 61, compound P17; page 62, compound P30<br>abstract  | 1-9, 12,<br>17, 24, 25 |
| X          | ROBINS M J ET AL: "NUCLEIC ACID RELATED COMPOUNDS. 39. EFFICIENT CONVERSION OF 5-IODO TO 5-ALKYNYL AND DERIVED 5-SUBSTITUTED URACIL BASES AND NUCLEOSIDES"<br>JOURNAL OF ORGANIC CHEMISTRY, AMERICAN CHEMICAL SOCIETY. EASTON, US,<br>vol. 48, no. 11, 1983, pages 1854-1862,<br>XP002069924<br>ISSN: 0022-3263<br>page 1855, scheme 1, compound 3a | 1-8                    |
|            | -/-   |                        |

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

° Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the International filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the International filing date but later than the priority date claimed

- "T" later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of the actual completion of the International search

17 August 2004

Date of mailing of the International search report

31/08/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Schmid, A

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In Application No  
PCT/GB2004/001687

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages   | Relevant to claim No. |
|------------|--|-----------------------|
| X          | J.R. MORRIS ET AL: "Nucleic Acid related compounds 31. Smooth and Efficient Palladium-Copper Catalyzed Coupling of Terminal Alkynes with 5-iodouracil Nucleosides"<br>TETRAHEDRON LETTERS,<br>vol. 22, 1981, pages 421-424, XP002292710<br>page 422, compounds 3a<br>-----   | 1-8                   |
| X          | J. BALZARINI ET AL: "Lack of Susceptibility of Bicyclic Nucleoside Analogs, Highly Potent Inhibitors of Varicella-Zoster Virus, to the Catabolic Action of Thymidine Phosphorylase and Dihydropyrimidine Dehydrogenase"<br>MOLECULAR PHARMACOLOGY,<br>vol. 61, no. 5, 2002, pages 1140-1145,<br>XP001183059<br>page 1141, compounds Cf 1381, Cf 2200;<br>figure 2<br>----- | 1-8, 17,<br>20-25     |

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### Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1.  Claims Nos.: 1-3, 14 (all partly) because they relate to subject matter not required to be searched by this Authority, namely:  
Although claims 20, 21 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2.  Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:  
see FURTHER INFORMATION sheet PCT/ISA/210
3.  Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

### Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

1.  As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2.  As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3.  As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4.  No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

#### Remark on Protest

- The additional search fees were accompanied by the applicant's protest.  
 No protest accompanied the payment of additional search fees.

**FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210**

**Continuation of Box II.1**

Although claims 20,21 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.

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**Continuation of Box II.2**

Present claims 1-3,14 relate to an extremely large number of possible compounds/products/apparatus/methods. Support within the meaning of Article 6 PCT and/or disclosure within the meaning of Article 5 PCT is to be found, however, for only a very small proportion of the compounds/products/apparatus/methods claimed. In the present case, the claims so lack support, and the application so lacks disclosure, that a meaningful search over the whole of the claimed scope is impossible. Consequently, the search has been carried out for those parts of the claims which appear to be supported and disclosed, namely those parts relating to the compounds and methods closely related the examples as mentioned in the description. Moreover, it has to be noted that according the extreme broady characterisation of the above claims a lot of possible novelty destroying documents would be found.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.

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| Int'l Application No |
| PCT/GB2004/001687    |

| Patent document cited in search report | Publication date | Patent family member(s) |               | Publication date |
|--|------------------|-------------------------|---------------|------------------|
| WO 02083651                            | A 24-10-2002     | WO                      | 02083651 A2   | 24-10-2002       |
|  |                  | CA                      | 2444148 A1    | 24-10-2002       |
|  |                  | EP                      | 1385831 A2    | 04-02-2004       |
|  |                  | US                      | 2003153584 A1 | 14-08-2003       |
|  |                  | US                      | 2003194375 A1 | 16-10-2003       |